LESSON RESOURCES: to help teach the skill of multi-digit multiplication

ONLINE:

[Standard method](http://www.multiplicationtool.org/help_standard.php)

[Lattice method](http://www.multiplicationtool.org/help_lattice.php)

[Partial Practice method](http://www.multiplicationtool.org/help_partial.php)

[Computation practice](http://www.mathplayground.com/multiplication05.html)

[Games and activities](http://www.lessonpathways.com/Pathways/Detail/48042/multiplying-1-2-3-digit-numbers)

FROM CLASSROOM:

Base ten blocks

Multiplication activity books

**Multiplication with Tens**

1. Do 10 x 3, 40 x 5, etc. with the manipulatives. Note the pattern.
2. Do 100 x 3, 40 x 30, etc., with zeros on both numbers. Note and learn the pattern.

**2 Place x 1 Place Multiplication**

1. 15 x 4. Lay out a grid 15 tall and 4 wide.
2. Exchange any group of 10 units for a ten bar.
3. Exchange any group of 10 tens for a hundred flat if needed.
4. Write the total of each place value correctly on the place value chart.
5. Later move on to 3 place x 1 place multiplication, etc.

**2 Place x 2 Place Multiplication**

1. 21 x 42. To introduce, make a grid 21 high and 42 wide and fill it in. Move quickly to paper and pencil as students won't have enough manipulatives to do this in their individual kits.
2. Practice this until it is mastered.
3. Later move on to 3 place x 2 place multiplication, etc.

**Gelosia Multiplication**

No manipulatives are needed for this. It enables children to do *huge* multiplication problems if they know their facts. Directions are in the [Marvelous Math Tricks handout](http://www.susancanthony.com/pdfhandouts/Mathhandout.pdf).

[WEIRD MULTIPLICATION:](http://www.mathteacherscircle.org/resources/materials/JTantonWeirdMultiplicationMSVersion.pdf)